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DEC 1 9 1994 SECRETARY, BOARD OF OIL, GAS & MINING

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BEFORE THE BOARD OF OIL, GAS, AND MINING DEPARTMENT OF NATURAL RESOURCES, STATE OF UTAH

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION BY PETITIONERS NORTH EMERY WATER USERS ASSOCIATION,) HUNTINGTON-CLEVELAND IRRIGATION COMPANY, AND CASTLE VALLEY SPECIAL SERVICES DISTRICT

POST HEARING MEMORANDUM OF NORTH EMERY WATER USERS ASSOCIATION AND HUNTINGTON) CLEVELAND IRRIGATION COMPANY Docket No. 94-027 Cause No. ACT/015/025-93B

Petitioners North Emery Water Users Association ("NEWUA") and Huntington Cleveland Irrigation Company ("Huntington-Cleveland") respectfully submit the following Post-Hearing Memorandum as directed by the Board of Oil, Gas & Mining ("Board"). Memorandum addresses the pending Administrative review of this Board of the issuance of a significant revision to the Permit of Co-op Mining Company ("Co-op") by the Division of Oil, Gas and Mining ("Division"). Petitioners NEWUA and Huntington-Cleveland also adopt by reference the Memorandum of Castle Valley Special Services District.

SIGNIFICANT FACTS

The following significant facts were established at the Hearing on October 25 and November 17, 1994.

- 1. Birch Spring and Big Bear Spring are important sources of drinking water for over 3,000 residents of Northern Emery County.
- 2. Birch Spring provides drinking water to members of NEWUA in northern Emery County.
- 3. Huntington-Cleveland holds the water rights to Birch Spring and Big Bear Spring.
- 4. Birch Spring and Big Bear Spring are outside but in the "adjacent area" to the "Permit Area" of Co-op.
- 5. Birch Spring has had a flow of 75 100 gpm since the 1940's until the last several years when flows have decreased to 20 gpm.
- 6. Birch and Big Bear Springs have been drinking water sources prior to the issuance of a mining permit to Co-op for its mining operations in Bear Canyon.
- 7. Co-op's Bear Canyon Mine, which was dry in 1990 is currently discharging water at rates between 300 and 500 gpm out of its portal.
- 8. Birch Spring, Big Bear Spring and the water intercepted in Co-op's Bear Canyon mine all have a common recharge area in the North Horn Formation of Gentry Mountain which is above and north of the mine and the springs.

- 9. The direction of underground water flow in the area of Bear Canyon Mine and Birch and Big Bear Springs is downward and southward.
- 10. Both Birch Spring and Big Bear Spring issue from faults or fractures in the rock.
- 11. Faults and fractures are the principle conveyances of underground water in the area of Co-op's mine.
- 12. The significant revision sought by Co-op if approved will extend the life of the Bear Canyon Mine by approximately three additional years.
- 13. Co-op will continue to utilize its existing workings and mine dewatering system to mine the tank seam as proposed in its significant revision.
- 14. Tritium analyses demonstrate that water from the mine and Birch Spring are of the same age and are indistinguishable by such analysis.
- 15. Any chemical differential between Birth Spring water and mine water may be attributable to mineralization of localized rock formations.
- 16. Both Birch Spring and Big Bear Spring issue from the Starpoint Sandstone Formation which is adjacent to and just below the Blackhawk Formation, the formation where Co-op's mine activity is located.
- 17. The Blackhawk Formation and Starpoint Sandstone Formation are hydrologically connected.

- 18. Studies by the United States Geological Survey characterize the regional aquifer as the Blackhawk-Starpoint Sandstone Aquifer.
- 19. Underlying the Starpoint Sandstone Formation is a thick (600 foot) confining layer of mancos shale which is impervious to water.
- 20. A Revised Probable Hydrologic Consequences document and a Revised Hydrologic Evaluation Document prepared by Co-op's consultant Earthfax Engineering were submitted to the Board in an attempt to demonstrate Co-op's compliance with Application requirements for hydrologic information.
- 21. Co-op's consultant, Earth Fax Engineering, failed to investigate or determine how far the fault or fracture that Birch Springs issues from extends upward from the Starpoint Sandstone into the Blackhawk Formation.
- 22. The Probable Hydrologic Consequences and Revised Hydrogeologic Evaluation of the Bear Canyon Mine Permit documents prepared by Earth Fax Engineers contained all of the hydrologic information for the Application for significant revision of the Permit of Co-op.
- 23. Co-op has not identified any replacement sources of water for loss of water quantity or reduction of water quality in Birch and Big Bear Springs.
- 24. Co-op has no explanation for an event in 1989 described in Co-op's Revised Hydrologic Evaluation on page 2-38, of a

temporary increase in water quantity and decrease in water quality in both Bear Canyon Mine and Birch Spring.

25. NEWUA has spent substantial monies to develop Birch Springs as a drinking water source.

POINT I

THIS BOARD HAS JURISDICTION AND AUTHORITY TO REVIEW THE PERMIT AND APPLICATION OF CO-OP

The jurisdiction of this Board to administratively review Coop's Permit as urged by Petitioners, and the scope of its review in conducting such administrative review is set forth in Utah Code Ann. § 40-10-14(3) and R645-300-200 of the Administrative Rules "Administrative and Judicial Review of Decisions on Permits." Specifically R645-300-211 of this chapter of the rules states:

211. General. Within 30 days after an applicant or permittee is notified of the decision of the Division concerning a determination made under R645-106, an application for approval of exploration required under R645-200, a permit for coal mining and reclamation operations, a permit change, a permit renewal, or a transfer, assignment, or sale of permit rights, the applicant, permittee, or any person with an interest which is or may be adversely affected may request a hearing on the reasons for the decision, in accordance with R645-300-200.

Petitioners NEWUA and Huntington-Cleveland, as owners and purveyors of drinking water from Birch Spring, are clearly persons with an interest which is or may be adversely affected. This regulation by establishing "current or potential adverse affect caused by the Division determination on a permit" purposefully gives this Board a wide scope of both jurisdiction and authority in

reviewing permit matters appealed to it. Nowhere in the Regulations is the Board's review limited to any specific aspect of a permit or revision to a permit. The dynamic nature of coal mining and its affects on the environment clearly require this wide review authority. One obvious example of adverse affect on NEWUA and Huntington-Cleveland is the prolonged life of the Bear Canyon Mine and its material damage to the hydrologic balance outside the permit area which will occur if the substantial revision to the Permit is upheld.

Thus, under the regulations governing this Board's review, if the Appellants are being adversely affected by Co-op's permitted mining activity or will be adversely affected by the substantial revision sought by Co-op, this Board has jurisdiction and authority to act on the determination of the Division to grant a substantial revision to Co-op's Permit.

POINT II

CO-OP MUST ESTABLISH THAT ITS APPLICATION MEETS ALL REGULATORY REQUIREMENTS

In its review, this Board should keep firmly in mind that Coop, the Applicant, carries the burden of proof and must prove that its application meets all requirements of the state coal mine

¹ For example, during the last Permit approval of Co-op's Bear Canyon Mine, the mine was relatively dry and not discharging any water. Since that time, the mine has encountered significant water, and currently discharges between 300 - 500 gpm. Never before has the Bear Canyon Mine permit been reviewed while the mine was encountering and discharging such significant amounts of water.

regulatory program. As set forth in Utah Code Ann. § 40-10-11 and R645-300-131.200, "The Applicant for a permit or permit change will have the burden of establishing that their Application is in compliance with all the requirements of the State Programs." As discussed below, Co-op fails to meet its burden of establishing compliance on numerous requirements of the State Program.

Co-op's burden of establishing compliance extends to numerous determinations required by the regulations which set forth the state regulatory program. These regulatory determinations include specific hydrologic determinations that are relevant to the present administrative review. These include:

Regulation	<u>Determination</u>
R645-301-724.310	Determining the Probable Hydrologic Consequences of the operation upon the quality and quantity of surface and ground water in the permit and adjacent areas.
R645-301-724.320	Whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area.
R645-301-728.100	Determination of the PHC of the proposed coal mining and reclamation operation upon the quality and quantity of surface and ground water under seasonal flow conditions for the proposed permit and adjacent areas.

² This is a very different standard than that employed when a violation is claimed. For violations, the Division rather than the permittee has the burden. See <u>Hidden Valley Coal v. Utah Bd. of Oil, Gas & Mining</u>, 866 P.2d 564, 567 (Utah App. 1993).

R645-301-728-310

Whether adverse impacts may occur to the hydrologic balance outside the permit area.

R645-301-728-330-4

What impact the coal mining and reclamation will have on ground water and surface water availability.

For each of these determinations it is Co-op as the applicant and not petitioners who must establish to this Board that each of these determinations have been properly made. Obviously, only after a complete Application is received by the Division can these determinations be made.³

POINT III

CO-OP'S APPLICATION FAILS TO MEET MANDATORY MINIMUM REQUIREMENTS

A primary purpose of an Application for a permit or significant revision to a permit is to provide sufficient information to the Division so that the Application may be reviewed for compliance with the State Program. See Utah Code Ann. § 40-10-10 and R645-300-112.400. Subsection (2)(c) of Utah Code Ann. § 40-10-10 in the Coal Mining and Reclamation Act, requires the following information in the Application in relation to hydrology:

(c) A determination of the probable hydrologic consequences of the mining and reclamation operations, both on and off the mine site with respect to the hydrologic regime, quantity and quality of water in surface and groundwater systems, including the dissolved

³ Also, the Division failed to consider or implement the requirements of 30 USC § 1309(a)(2), that was adopted as part of the Energy Policy Act of 1992 and requires replacement of drinking water lost due to underground mining. This federal law should not be ignored.

and suspended solids under seasonal flow conditions, and the collection of sufficient data for the mine site and surrounding areas so that an assessment can be made by the division of the probable cumulative impacts of all anticipated mining in the area upon the hydrology of the area and, particularly, upon water availability; but this determination shall not be required until such time as hydrologic information on the general area prior to mining is made available from an appropriate federal or state agency. The permit shall not be approved until this information is available and is incorporated into the application.

As discussed above, a number of critical determinations as to the impact of mining on hydrology in the area of the mine must be made if an application for a significant revision is to be approved. These determinations cannot be made without a complete To assure that a complete Application is submitted, Application. Administrative Rule R645-300 sets forth minimum requirements for information that must be provided as part of the permit body of regulation This contains applications. and Air Quality, subsections Biology, Land Use on Soils, Engineering, Geology, Hydrology and Bonding and Insurance.

At the hearing, the focus was rightfully on the Hydrology portion of this Rule (R645-301-700). This portion requires that the existing hydrologic resources be described and a document known as a Probable Hydrologic Consequences ("PHC") be prepared. See also Utah Code Ann. § 40-10-10(2)(c). The hydrologic information submitted by Co-op in its Application was contained in a Revised Hydrologic Evaluation (Exhibit D of Co-op at the hearing) and the PHC which was revised by Co-op's consultant for the substantial

revision sought (Exhibit C of Co-op). The purpose of a PHC is not only to convey hydrologic information but to accurately predict the impact on the hydrology caused by mining.

The Application by Co-op is by law and regulation required to contain certain mandatory baseline information. One critical piece of baseline information was shown at the hearing to be conspicuously absent from Co-op's Application. Administrative Rule R645-301-724.100 requires that "Groundwater quantity description will include, at a minimum, approximate rates of discharge or usage and depth to the water in the coal seam, and each water being stratum above and potentially impacted stratum below the coal seam."

Division Hydrologist, Tom Munson, testified that both Birch Spring and Big Bear Spring came within the parameter of R645-301-724.100 as issuing from potentially impacted stratum below Co-op's mine activity. Munson also testified that the minimum baseline information for Co-op's application would require water quantity measurements from Birch and Big Bear Springs prior to mining of the coal seams in the Blackhawk Formation in Bear Canyon by Co-op immediately above the Springs. This information is intended by regulation to and would obviously provide a baseline from which the

⁴ The Division and this Board are also specifically empowered to require any additional data deemed necessary. See R645-301-724.420 and .500.

⁵ The preceding portion of this section requires water quality baseline information.

subsequent impact of Co-op's Mining on Birch and Big Bear Springs could be determined and measured.

However, the Application submitted by Co-op was missing critical baseline information as to the flows and water quality of Birch and Big Bear Springs. Both Co-op's hydrologist Richard White of Earth Fax Engineering, and the Division's Hydrologist Tom Munson testified that "Initial Spring and Minewater Flow Rates in Table 2-5 on page 2-10 of the PHC submitted by Co-op contains the required baseline information. While both Big Bear and Birch Springs were listed as springs for baseline information purposes on Table 2-5, they were not measured in 1984.

The omission of this minimum baseline information as to the flows and water quality of Birch and Big Bear Springs was not a mere technical defect. Without the mandatory baseline information as to the flows of the Springs in the pre-mining period, it is impossible for the Division to gauge the impacts of mining on the water quantity or quality of the Springs and determine, as required by Utah Code Ann. § 40-10-10(c)(2), R645-301-724.310 and 320, the probable hydrologic consequences and that there will be no material impact to the hydrologic balance outside the permit area. The Application of Co-op does not meet minimum legal and regulatory requirements. The Division erred in approving the significant revision to the Permit based on an incomplete Application without the mandatory baseline information. For this reason alone, the

significant revision must be denied and referred back to the Division.

POINT IV

CO-OP HAS NOT DEMONSTRATED THE LACK OF MATERIAL DAMAGE TO THE HYDROLOGIC BALANCE

As set forth at length in Castle Valley Special Services District's Memorandum, the conclusions of Co-op's consultant that the Bear Canyon Mine is not materially damaging the aquifer outside of the Permit Area are not supported by the known data or the impartial studies of USGS. In fact, the evidence points to interconnection between the water in the Springs and the Mine. such evidence includes a common recharge source in close proximity, an event in 1989 where both the Mine water and Spring water temporarily increased, and faulty and fracturing transporting water to and through the area to the Springs.

Also, there are many unanswered questions including the height of the fault or fracture that the Springs issue from. Co-op was not able to answer or the cause of changes in flow simultaneously in the Springs and the Mine. For these reasons the Permit cannot be granted.

CONCLUSION

This Board has authority to deny or require modification of Co-op's Application. See Utah Code Ann. § 40-10-11(1). In light of the failure of Co-op's Application to meet minimum requirements and the facts demonstrated at the hearing that Co-op's mining is

having a material adverse impact on Birch and Big Bear Springs, this Application must be denied or at least referred back to the Division with instructions that sufficient studies must be done to determine the extent of adverse impact on Birch and Big Bear Springs.

DATED this 1914 day of December, 1994.

NIELSEN & SENIOR, P.C.

North Emery Attorneys før Users Association and Huntington-

CERTIFICATE OF SERVICE

I hereby certify that on this _____ day of December, 1994, I have caused to be sent, through the United States mail, first-class, postage prepaid, a true and correct copy of the foregoing POST HEARING MEMORANDUM OF NORTH EMERY WATER USERS ASSOCIATION AND HUNTINGTON CLEVELAND IRRIGATION COMPANY, addressed as follows:

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